

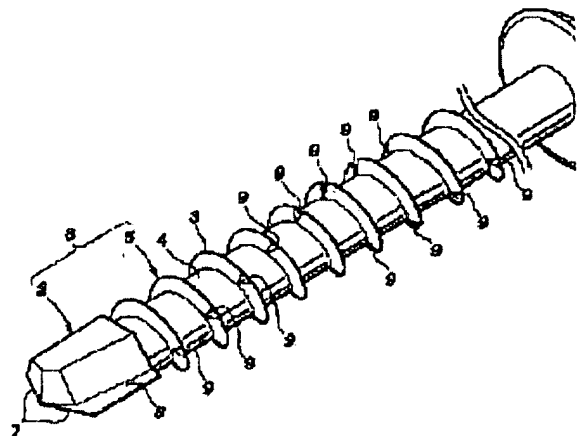
DRILL SCREW

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Abstract of JP11166519

PROBLEM TO BE SOLVED: To efficiently perform screwing-in work without clogging chips when mutually fastening plural members largely different in hardness and tenacity by arranging a chip discharge cutout on a screw thread capable of passing the chips generated by cutting by a drill part through to the head part side.

SOLUTION: Plural V-shaped valleys 9 to successively send out chips from recess grooves 8 of a drill part 2 to the head part 1 side, are formed on a screw thread 3 by cutting out it over the whole height of the screw thread 3. These V-shaped valleys 9 are arranged in a spiral shape at a lead angle almost orthogonal to the screw thread 3. V-shaped valley groups juxtaposed in this spiral shape are arranged, for example, by two sets in response to the recessed grooves 8 and cutting blades 7 symmetrically arranged a pair by a pair to the axis. Therefore, chips can be quickly sent out to the head part 1 side since the chips from the recess grooves 8 are also sent in the shaft direction through the V-shaped valleys 9 as well as they are sent to the head part 1 side along the screw thread 3 between a shaft body 4 and an inner peripheral surface of a prepared hole.

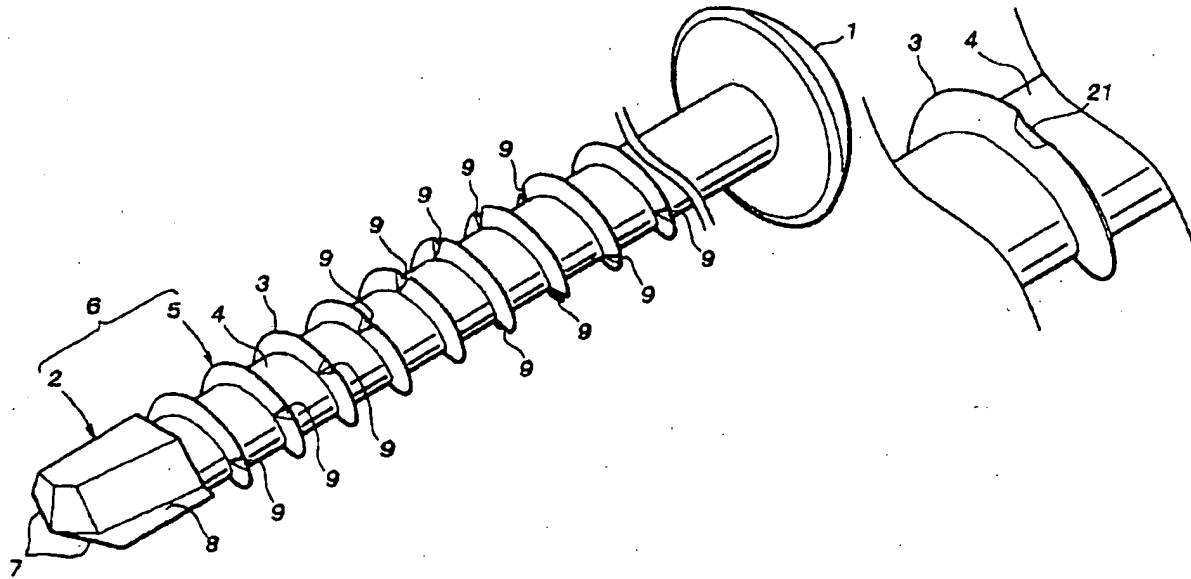


- 5 ねじ部
6 軸部
7 切削刃
8 逃げ溝

- 9 V字谷
21 台形状部分
31 山形状部分

【図1】

【図2】



【図3】

【図4】

【図5】

